



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wang et al.

Confirmation No.: 3192

Application No.: 10/791,177

Art Unit: 1714

Filed: March 2, 2004

Examiner: Vickey M. Ronesi

For: **Rubber Composition Containing  
Functionalized Polymer Nanoparticles**

Attorney Docket No.: P02083US1A

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
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Sir:

This Statement is submitted in compliance with 37 C.F.R. § 1.56.

A list of patent(s) and/or publication(s) is set forth on the attached Form PTO-1449. A copy of each non-U.S. patent item is enclosed.

Regarding the books listed as: "Dendrimers and Dendrons, Concept, Synthesis, Application", edited by Newkome G.R, Wiley-VCH, 2001 and "Synthesis, Functionalization and Surface Treatment of Nanoparticles," edited by Baraton M-I, ASP (Am. Sci. Pub.), Stevenson Ranch, California, 2003, the most relevant sections of these books are copied and submitted herewith. Should the Examiner believe that full copies of these textbooks are reasonably necessary to properly examine or treat this matter, the Applicant will do so. (See 37 CFR § 1.105 regarding the Examiner's authority to issue a "Requirement for Information.")

The Commissioner is hereby authorized to charge the filing fee of this Information Disclosure Statement in the amount of \$180.00 to Bridgestone Americas Holding, Inc. Deposit Account No. 0600925, reference P02083US1A.

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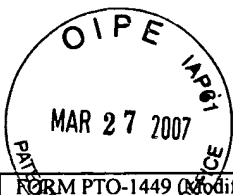
on March 23, 2007

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FORM PTO-1449 (Modified)  
U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use several sheets if necessary)

(37 CFR 1.98(b))

Atty Docket No.: P02083US1A

Serial No.: 10/791,177

Applicant(s): Wang et al.

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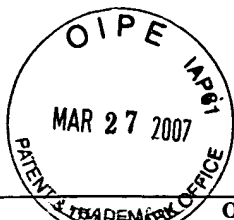
Group: 1714

**U.S. PATENT DOCUMENTS**

Exam. Init. *		Publication/ Patent Number							Publication/ Issue Date	Patentee	Class	Subclass	Filing Date	
		4	3	2	6	0	0	8	04/20/1982	Rembaum				
		4	3	8	6	1	2	5	05/31/1983	Shiraki et al.				
		4	7	1	7	6	5	5	01/05/1988	Fluwylar				
		4	7	7	4	1	8	9	09/27/1988	Schwartz				
		4	8	6	1	1	3	1	08/29/1989	Bois et al.				
		5	0	6	6	7	2	9	11/19/1991	Srayer, Jr. et al.				
		5	0	7	3	4	9	8	12/17/1991	Schwartz et al.				
		5	1	9	4	3	0	0	03/16/1993	Cheung				
		5	5	1	4	7	3	4	04/07/1996	Maxfield et al.				
		5	5	2	1	3	0	9	05/28/1996	Antkowiak et al.				
		5	7	0	7	4	3	9	01/13/1998	Takekoshi et al.				
		5	9	1	0	5	3	0	06/08/1999	Wang et al.				
		6	1	9	7	8	4	9	03/06/2001	Zilg et al.				
		6	2	2	5	3	9	4	05/01/2001	Lan et al.				
		6	3	9	5	8	2	9	05/28/2002	Miyamoto et al.				
		6	4	4	1	0	9	0	08/27/2002	Demirors et al.				
		6	6	9	3	7	4	6	02/17/2004	Nakamura et al.				
		6	8	5	8	6	6	5	02/22/2005	Larson				
		6	8	6	1	4	6	2	03/01/2005	Parker et al.				
		6	9	5	6	0	8	4	10/18/2005	Wang et al.				
		7	0	7	1	2	4	6	07/04/2006	Xie et al.				
		7	1	1	2	3	6	9	09/26/2006	Wang et al.				

**FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION**

Exam. Init.		Document Number							Publication Date	Country or Patent Office	Class	Subclass	Translation	
													Yes	No
		0	3	2	2	9	0	5	07/05/1989	Europe				
		0	3	5	2	0	4	2	01/24/1990	Europe				
		0	4	7	2	3	4	4	02/26/1992	Europe				
		0	7	4	2	2	6	8	11/13/1996	Europe				
		3	4	3	4	9	8	3	04/03/1986	Germany				
		4	2	4	1	5	3	8	06/16/1994	Germany				
	0	6	2	4	8	0	1	7	09/06/1994	Japan				
	2003-	0	0	9	5	6	4	0	04/03/2003	Japan				
		9	7	0	4	0	2	9	02/06/1997	PCT				
		0	3	3	2	0	6	1	04/17/2003	PCT				



OTHER DOCUMENTS (Including Author, Title, Date**, Relevant pages, Place of Publication***)	
	Reaction of Primary Aliphatic Amines with Maleic Anhydride, Lester E. Coleman et al., J. Org. Chem., 24, 185, 1959, pp. 135-136.
	Synthesis, Thermal Properties and Gas Permeability of Poly (N-n-alkylmaleimide)s, A. Matsumoto et al., Polymer Journal Vol. 23, No. 3, 1991, pp. 201-209.
	Simultaneous TA and MS Analysis of Alternating Styrene-Malei Anhydride and Styrene-Maleimide Copolymers, Thermochim. Acta, 277, 14, 1996.
	Synthesis and Photocrosslinking of Maleimide-Type Polymers, Woo-Sik Kim et al., Macromol. Rapid Commun., 17, 835, 1996, pp 835-841.
	Polysulfobetaines and Corresponding Cationic Polymers. IV. Synthesis and Aqueous Solution Properties of Cationic Poly (MIQSDMAPM), Wen-Fu Lee et al., J. Appl. Pol. Sci. Vol 59, 1996, pp. 599-608.
	Chemical Modification of Poly (styrene-co-maleic anhydride) with Primary N-Alkylamines by Reactive Extrusion, I Vermeesch et al., J. Applied Polym. Sci., Vol 53, 1994, pp. 1365-1373.
	Vulcanization Agents and Auxiliary Materials, Kirk-Othmer, Encyclopedia of Chemical Technology, 3rd Ed., Wiley Interscience, NY, 1982, Vol 22, pp. 390-403.
	Dialkylimidazolium Chloroaluminate Melts: A New Class of Room-Temperature Ionic Liquids for Electrochemistry, Spectroscopy, and Synthesis. J.S. Wilkes, J.A. Levisky, B.A. Wilson, Inorg. Chem. 1982, 21, pp. 1263-1264.
	Polymer-m-Ionic-Liquid Electrolytes" C. Tiyapiboonchaiya, D.R. MacFarlane, J. Sun, M. Forsyth, Micromol. Chem. Phys., 2002, 203, pp. 1906-1911.
	EXAFS Investigations of the Mechanism of Facilitated Ion Transfer into a Room-Temperature Ionic Liquid. M. Jensen, J.A. Dzielawa, P. Rickert, M.L. Dietz, JACS, 2002, 124, pp. 10664—10665.
	Structure of molten 1,3-dimethylimidazolium chloride using neutron diffraction. C. Hardacre, J.D. Holbrey, S.E. J. McMath, D.T. Bowron, A.K. Soper, J. Chem. Physics, 2003, 118(1), pp. 273-278.
	Reverse Atom Transfer Radical Polymerization of Methyl Methacrylate in Room-Temperature Ionic Liquids, H. Ma, X. Wan, X. Chen, Q-F. Zhou, J. Polym. Sci., A. Polym. Chem. 2003, 41, pp. 143-151.
	Non-Debye Relaxations in Disordered Ionic Solids, W. Dieterich, P. Maass, Chem. Chys. 2002, 284, pp 439-467.
	Polymer Layered Silicate Nanocomposites, Giannelis E.P. Advanced Materials vol. 8, no. 1, 1 January 1996, pp. 29-35.
	A Review of Nanocomposites 2000, J.N. Hay, S. J. Shaw.
	Recent Advances in Flame Retardant Polymer Nanocomposites, Tilman, J.W. et al., pp. 273-283.
	"Dendrimers and Dendrons, Concept, Synthesis, Application", edited by Newkome G.R, Wiley-VCH, 2001, pp. 45, 191-310.
	"Synthesis, Functionalization and Surface Treatment of Nanoparticles", edited by Baraton M-I, ASP (Am. Sci. Pub.), Stevenson Ranch, California, 2003, pp. 51-52, 174-208.
Examiner	Date Considered
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	